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PTO/SB/21 (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/644,424
	Filing Date	August 20, 2003
	First Named Inventor	Steve R. Jones
	Group Art Unit	
	Examiner Name	
Total Number of Pages in This Submission		Attorney Docket Number NORTH-506A

ENCLOSURES (check all that apply)		
<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Assignment Papers (for an Application)	<input type="checkbox"/> After Allowance Communication to Group
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment / Reply	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	Certificate of Mailing and Return Postcard.
<input checked="" type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Response to Missing Parts/Incomplete Application	Remarks	
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Bruce B. Brunda STETINA BRUNDA GARRED & BRUCKER
Signature	
Date	December 8, 2003

CERTIFICATE OF MAILING	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date: 12/8/2003	
Typed or printed name	Dawn A. Sacks
Signature	
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ATTORNEY DOCKET NO: NORTH-506A

TITLE: STRUCTURAL ASSEMBLIES USING INTEGRALLY MOLDED, AND WELDED
MECHANICALLY LOCKING Z-PINS

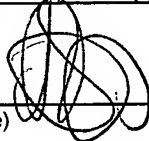
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Dawn A. Sacks

(Typed name of person signing certificate)

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

1. Information Disclosure Statement (of 2 pages);
2. Information Disclosure Statement by Applicant – U.S. Patents (in duplicate);
3. U.S. Patent Disclosure Documents (of 12 stapled packets);
4. Information Disclosure Statement by Applicant - Foreign (in duplicate);
5. Foreign Disclosure Documents (of 12 pages);
6. Information Disclosure Statement by Applicant – Non-Patent (in duplicate);
7. Non-Patent Disclosure Documents (of 10 stapled packets);
8. Certificate of Mailing; and
9. Return Postcard.



Office: NORTH-506A

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Northrop Grumman Corporation)
Serial No.: 10/644,424) Art Unit: Unknown
Filing Date: August 20, 2003) Examiner: Unknown
For: STRUCTURAL ASSEMBLIES USING)
INTEGRALLY MOLDED, AND)
WELDED MECHANICALLY LOCKING)
Z-PINS)

**INFORMATION DISCLOSURE STATEMENT
PURSUANT TO 37 C.F.R. SECTION 1.97**

Mail Stop DD
Assistant Commissioner for Patents
Post Office Box 1450
Alexandria, Virginia 22313-1450

Dear Sir/Madam:

Pursuant to 37 C.F.R. § 1.97, the following Information Disclosure Statement is submitted as listed on form PTO/SB/08A and 08B enclosed herewith in duplicate. Copies of all disclosure documents are attached hereto for the Examiner's review.

No representation is made that the references disclosed herein legally constitute prior art, or that more relevant references are not available. The disclosure documents enclosed herewith and listed on the attached form (PTO/SB/08A and 08B) are printed in the English language and/or accompanied by an Abstract published in the English language.

The references listed herein, when taken alone or in combination are not believed to disclose nor make obvious the invention as claimed in the subject application.


As this Information Disclosure Statement is being submitted before the stipulated three

months from the filing date of the application and/or before the mailing of a first Office Action,
it is believed that no fee is required.

If a fee is required, please charge Account Number 19-4330.

Respectfully submitted,

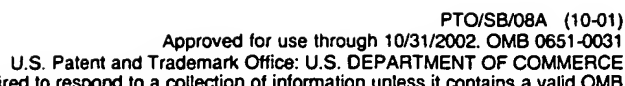
Dated: 10/8/03

By: 

Customer No. 007663

Bruce B. Brunda
Registration No. 28,497
STETINA BRUNDA GARRED & BRUCKER
75 Enterprise, Suite 250
Aliso Viejo, CA 92656
(949) 855-1246

PTO/SB/08A (10-01)



Substitute for form 1449A/PTO

(use as many sheets as necessary)

Sheet 1 of 1

Complete if Known

Application Number	10/644,424
Filing Date	August 20, 2003
First Named Inventor	Steve R. Jones
Art Unit	
Examiner Name	
Attorney Docket Number	NORTH-506A

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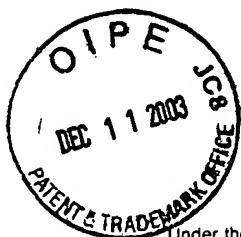
Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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PTO/SB/08A (10-01)

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>		Complete if Known			
		Application Number	10/644,424		
		Filing Date	August 20, 2003		
		First Named Inventor	Steve R. Jones		
		Art Unit			
		Examiner Name			
Sheet	1	of	1	Attorney Docket Number	NORTH-506A

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		US-			
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FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³	-Number ⁴ -Kind Code ⁵ (if known)			
		WO	03/031159 A1	04-17-2003	Benson	

Examiner Signature	Date Considered
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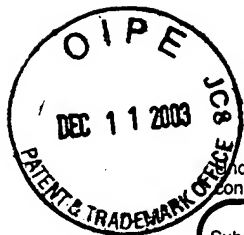
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¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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English language Translation is attached.

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Substitute for form 1449B/PTO		Complete if Known	
		Application Number	10/644,424
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Filing Date	August 20, 2003
		First Named Inventor	Steve R. Jones
		Group Art Unit	
		Examiner Name	
		Attorney Docket Number	NORTH-506A
Sheet	1	of	0

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Torr Technologies, Inc. 1999 Catalog	
		Article: Considering Resin Transfer Molding? By Bob Lacovara (1995)	
		Website: http://webpages.charter.net/dawill/tmoranwms/Casting_Molding.html : MOLDING OVERVIEW (printed 6/30/03)	
		Website: http://www.genfoundry.com/psc.html : Precision Sand Casting (printed 6/30/03)	
		Website: http://www.genfoundry.com/rpm.html : Rubber Plaster Molding (RPM) (printed 6/30/03)	
		Website: http://www.genfoundry.com/ic.html : Investment Casting (printed 6/30/03)	
		Website: http://www.genfoundry.com/post.html : Post Processes (printed 6/30/03)	
		Website: http://www.sfsa.org/tutorials/ice_cleat/icleat_03.htm : What is the Most Effective Casting Method? (1995)	
		Website: http://www.nasatech.com/Briefs/May98/NPO19918.html : Nearly Isotropic Resin-Transfer-Molded Composites (May 1998?)	
		Website: http://www.rtmcomposites.com/rtm.html : RTM (Resin Transfer Molding) (2003)	

Examiner Signature	Date Considered
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¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

1

of

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Application Number	10/644,424
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First Named Inventor	Steve R. Jones
Group Art Unit	
Examiner Name	
Attorney Docket Number	NORTH-506A

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Torr Technologies, Inc. 1999 Catalog	
		Article: Considering Resin Transfer Molding? By Bob Lacovara (1995)	
		Website: http://webpages.charter.net/dawill/tmoranwms/Casting_Molding.html : MOLDING OVERVIEW (printed 6/30/03)	
		Website: http://www.genfoundry.com/psc.html : Precision Sand Casting (printed 6/30/03)	
		Website: http://www.genfoundry.com/rpm.html : Rubber Plaster Molding (RPM) (printed 6/30/03)	
		Website: http://www.genfoundry.com/ic.html : Investment Casting (printed 6/30/03)	
		Website: http://www.genfoundry.com/post.html : Post Processes (printed 6/30/03)	
		Website: http://www.sfsa.org/tutorials/ice_cleat/icleat_03.htm : What is the Most Effective Casting Method? (1995)	
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